

REMARKS

By this Amendment, Applicants have canceled claim 27 without prejudice or disclaimer, amended claims 1, 18, 41, and 42, and added new claims 59 and 60. No new matter has been added. Claims 1-26 and 41-60 are pending on the merits.

In Applicants' Amendment filed November 5, 2003, Applicants requested acknowledgement of Applicants' claim for domestic priority under 35 U.S.C. § 119(e). The Office Action mailed January 30, 2004, does not include such an acknowledgement. Therefore, Applicants respectfully renew their request for acknowledgement of Applicants' claim for domestic priority under 35 U.S.C. § 119(e).

Applicants also requested in the Amendment filed November 5, 2003, that a Form PTO 892 be issued listing the Pappas reference (U.S. Patent No. 4,101,872), which was cited in claim rejections in the Office Action dated May 7, 2003. The Office Action mailed January 30, 2004, does not include a Form PTO 892, which lists Pappas. Therefore, Applicants respectfully renew their request for the issuance of a Form PTO 892, which lists the Pappas reference.

In the Office Action, claims 1-8, 18-25, 27, 41-49, and 52-57 were rejected under 35 U.S.C. §103(a) based on Grabowski et al. (U.S. Patent No. 3,713,491) in combination with Wootton (U.S. Patent No. 3,848,231). Claims 1, 18, 41, 43, and 52 are the only independent claims rejected. Of those independent claims, Applicants have amended claims 1, 18, and 41, thereby obviating the § 103(a) claims rejection based on Grabowski et al. combined with Wootton because those references, taken individually or in combination, fail to disclose or suggest all of the subject matter recited in amended claims 1, 18, and 41. Furthermore, Applicants respectfully traverse the

§ 103(a) rejection of independent claims 43 and 52 because the Office Action fails to establish a case of *prima facie* obviousness, as will be explained in more detail below.

Amended Independent Claim 1

Applicants' amended independent claim 1 recites a system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, "wherein detection of [a] fire condition in any one of the plurality of storage units does not necessarily result in discharging of fire suppressant material into others of the plurality of storage units." The Grabowski et al. reference and the Wootton reference, taken individually or in combination, do not disclose or suggest at least that subject matter recited in claim 1.

In particular, the Grabowski et al. reference discloses a portable automatic fire protection system that automatically initiates extinguishing fluid discharge from all units in response to fire detection by any single unit. The Wootton reference discloses a system for transmitting, via a radio link to a central station, alarm indications at a plurality of monitored stations. In other words, neither the Grabowski et al. nor the Wootton reference discloses or suggests a system wherein detection of a fire condition in any one of a plurality of storage units does not necessarily result in discharging of fire suppressant material into others of the plurality of storage units. Therefore, Applicants' independent claim 1 is patentably distinguishable from the Grabowski et al. and Wootton reference, taken individually or in combination.

Amended Independent Claim 18

Applicants' amended independent claim 18 recites a fire suppression and indication system including a plurality of storage units, and "a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, the first signal being an infrared signal" The Grabowski et al. reference and the Wootton reference, taken individually or in combination, do not disclose or suggest at least that subject matter recited in claim 18.

In particular, the Grabowski et al. reference discloses a plurality of independent fire suppressor units that may be connected together in series by inserting a plug of one unit into a receptacle of another unit, and an end unit that may be connected to a ramp alarm station and an end of line station. In other words, the Grabowski et al. fire suppressor units are connected together in series by electrical leads. Grabowski et al., however, does not disclose or suggest a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, the first signal being an infrared signal, as recited in Applicants' independent claim 18.

Like Grabowski et al., the Wootton reference does not disclose a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, the first signal being an infrared signal. Rather, Wootton discloses a system for transmitting, via a radio link to a central station, alarm indications at a plurality of monitored stations. Each monitored station includes a different code identification number that controls pulse position modulation of a carrier that is transmitted to the central station only in response to an alarm condition being sensed. The type of alarm being sensed also pulse position modulates the carrier transmitted from the peripheral station to the central station. At the central station, the carrier is

received and the pulse position modulated pulses provide indications of the identity of the alarm station at which the alarm is sensed and the cause of the alarm sensed. In other words, the Wootton system relies on radio link pulse modulated signals for alarm location identification and alarm type identification rather than on an infrared signal. Accordingly, Wootton does not disclose or suggest a transmitter associated with storage units and configured to transmit a first signal upon detection of a fire condition, wherein the first signal is an infrared signal.

In the Office Action, the statement rejecting claim 8 acknowledges that neither Grabowski et al. nor Wootton discloses using an infrared signal. Office Action at 5. The Office Action asserts, however, that "it would have been obvious . . . that other wireless links, including an infrared link, can be used in a system such as taught by Grabowski et al. and Wootton without unexpected results, whereby infrared can specifically be chosen if radio interference may be a problem in the application environment." Id. Applicants respectfully traverse the rejection statement's assertion because there is no suggestion or motivation to modify either the Grabowski et al. reference or Wootton reference to transmit an infrared signal.

According to the guidance of the M.P.E.P., "[t]o establish a *prima facie* case of obviousness, . . . there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." M.P.E.P. § 2143. The M.P.E.P. further advises that "[t]he teaching or suggestion to make the claimed combination . . . must . . . be found in the prior art, not in applicant's disclosure. Id. (citation omitted). "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the

desirability of the combination.” § 2143.01 (citation omitted). Furthermore, “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” Id. (citation omitted).

Because the Office Action’s proposed hypothetical modification to the Grabowski et al. reference’s system would change its principle of operation, the modification is not *prima facie* obvious. The Grabowski et al. reference discloses electrical leads connecting control circuit terminals of a plurality of suppressor units to produce sympathetic actuation and extinguishing medium discharge from all of the units in response to fire detection by any of the associated fire detectors. If the Grabowski et al. electrical leads were replaced with infrared signal transmitters in the manner proposed by the hypothetical modification, there is a strong possibility that not all of the Grabowski et al. suppressor units would be triggered by a signal from any one suppressor unit due to the line of sight nature of infrared signals. Furthermore, Grabowski et al. discloses a ramp alarm system that is adapted to be connected to a source of alternating current power that provides a charging current to the batteries of all of the detector units. If infrared signals were substituted for the electrical leads of Grabowski et al., the batteries of all of the detector units would not be charged. For at least those reasons, the Office Action’s hypothetical proposed substitution of infrared signals for Grabowski et al.’s electrical leads would defeat several principles of operation of the Grabowski et al. system. Thus, there is no suggestion or motivation to make the Office Action’s hypothetical proposed modification of Grabowski et al.’s system.

Turning to the Wootton reference, that reference discloses that an object of Wootton's invention is "to provide a new and improved system for transmitting to a central station, via a radio link, indications of the identity of a peripheral station responding to an alarm condition, as well as indicative of the nature of the alarm being sensed." Col. 2, lines 17-22. Wootton discloses that in response to an alarm condition at a particular peripheral station, a transmitter at the peripheral station is activated for a number of predetermined time periods separated from each other by a relatively long time interval. Wootton discloses that "[b]y providing relatively long time intervals between adjacent transmissions a number of peripheral stations can transmit data substantially simultaneously to the central station via a single radio band." Col. 1, lines 33-37. In other words, the Wootton system relies on using radio links not only to transmit from remote locations, but also to identify the location and the type of alarm condition being sensed at the remote location. As a result, it would be counter to Wootton's principle of operation to substitute an infrared signal for Wootton's prescribed radio link in the hypothetical manner proposed by the Office Action. In fact, since at least one of the objectives of Wootton's invention relates to radio links, Wootton teaches away from the hypothetical modification proposed in the Office Action. Therefore, there is no suggestion or motivation to make the Office Action's hypothetical proposed modification of Wootton's system.

Because there no suggestion or motivation to make the Office Action's proposed hypothetical modification to either the Grabowski et al. reference or the Wootton reference, Applicants' independent claim 18 is not *prima facie* obvious based on those references.

Independent Claim 41

Applicants' amended independent claim 41 recites a fire suppression and indication system for use in an aircraft, the system including a plurality of containers in the storage area, "a fire suppression device located inside each of the containers . . . ; and a receiver configured to be positioned within the storage area and external to the containers, wherein the receiver is configured to detect [a] first signal and send a second signal to the control panel in the cockpit of the aircraft." The Grabowski et al. reference and the Wootton reference, taken individually or in combination, do not disclose or suggest at least that subject matter recited in claim 41.

In the Office Action, the statement rejecting claims 41 and 42 asserts that "since Grabowski et al. teaches the protection of aircraft cargo, it would have been obvious . . . to include the remote alarm and control panel in the cockpit and is applicable to aircraft cargo in the configuration of a plurality of storage containers each having a base and a cover with an opening for allowing the signal transmission for reception by a corresponding overhead infrared receiver in the storage area such that for a system such as taught by Grabowski et al. and Wootton." Office Action at 7. Applicants respectfully traverse the rejection statement's assertion at least because the Grabowski et al. suppression units are not disclosed as being configured for placement within containers within a storage area. Rather, the Grabowski et al. reference discloses selectively distributing a plurality of fire suppression units so as to provide coverage of an entire area to be protected by flooding the entire area with extinguishing agent. Col. 5, lines 7-8, 14-16. If the fire suppression units of Grabowski et al. were placed within containers, they would not be able to operate under the principle intended by Grabowski et al. since they would not be able to flood an entire area of the storage

area. For at least these reasons, there is no suggestion or motivation to modify the Grabowski et al. system in the hypothetical manner proposed in the rejection statement. Therefore, Applicants' independent claim 41 is patentably distinguishable from the Grabowski et al. and Wootton references, taken individually or in combination.

Independent Claim 43

Applicants' independent claim 43 recites a system for detecting and suppressing a fire condition in a storage unit in a storage area including "a transmitter . . . configured to transmit a first signal upon detection of the fire condition, wherein the first signal is an infrared signal" As outlined above with respect to claim 18, the Grabowski et al. and Wootton references, taken individually or in combination, fail to disclose or suggest at least that subject matter recited in Applicants' independent claim 43. Therefore, claim 43 is patentably distinguishable from those references.

Independent Claim 52

Applicants' independent claim 52 recites a fire suppression system and indication system including a plurality of storage units and "a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, wherein the first signal is an infrared signal" As outlined above with respect to claim 18, the Grabowski et al. and Wootton references, taken individually or in combination, fail to disclose or suggest at least that subject matter recited in Applicants' independent claim 52. Therefore, claim 52 is patentably distinguishable from those references.

New Independent Claim 60

Applicants' new independent claim 60 recites a system for detecting and suppressing a fire condition in a storage unit including "a plurality of fire suppression devices, wherein at least two of the fire suppression devices are associated with different storage units, and wherein the fire suppression devices are configured to discharge a fire suppressant material only into a storage unit experiencing the fire condition." For reasons at least similar to those outlined above with respect to claim 1, the Grabowski et al. and Wootton reference fail to disclose or suggest at least that subject matter recited in Applicants' new independent claim 60. Therefore, claim 60 is patentably distinguishable from those references.

In the Office Action, claims 9-17, 50, and 51 were rejected under 35 U.S.C. § 103(a) based on Grabowski et al. and Wootton in view of one or more of the following references: Eguchi (U.S. Patent No. 3,909,814), Fierbaugh (U.S. Patent No. 4,987,958), and Sears (U.S. Patent No. 6,032,745). None of those references discloses or suggests the above-outlined subject matter that is neither disclosed nor suggested by the Grabowski et al. and Wootton references. Furthermore, each of claims 9-17, 50, and 51 depends from either independent claim 1 or independent claim 43. Consequently, claims 9-17, 50, and 51 should be allowable for at least the same reasons claims 1 and 43 are allowable.

Conclusions

For at least the reasons set forth above, independent claims 1, 18, 41, 43, 52, and 60 should be allowable. Dependent claims 2-17, 19-26, 42, 44-51, and 53-59 depend from one of independent claims 1, 18, 41, 43, and 52. Consequently, those

dependent claims should be allowable for at least the same reasons their respective independent claims are allowable.

Therefore, Applicants respectfully request the reconsideration of this application, the withdrawal of the outstanding claim rejections, and the allowance of claims 1-27 and 41-60.

If the Examiner believes that a telephone conversation might advance prosecution, the Examiner is cordially invited to call Applicants' undersigned attorney at 571-203-2739.

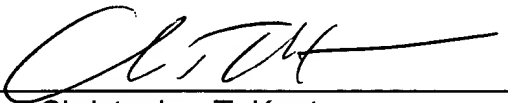
Applicants respectfully submit that the Office Action contains numerous assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 6-0916.

Respectfully submitted,

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